

WHAT IS CLAIMED IS:

1. A hydraulic fluid reservoir having at least one hydraulic fluid port and comprising:
  - 5 a container having a hollow body with a top; a conduit having a bottom within the container and a top above the bottom thereof, the conduit having an opening adjacent to the bottom of the conduit, the opening being spaced-apart below the top of the container; and a closure member releasably and sealingly connected to the top of the conduit, whereby hydraulic fluid can be added to the container via the conduit up to the level of the opening of the conduit, addition of further hydraulic fluid fills the conduit to the top thereof and the conduit overflows if additional hydraulic fluid is added after the top of the conduit is reached by the fluid.
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2. A hydraulic fluid reservoir as claimed in claim 1, wherein the reservoir is sealed apart from said closure member and said at least one port when the closure member is sealingly connected to the top of the conduit and an air pocket is thereby trapped in the container between the top of the container and the bottom of the conduit when the container is filled with hydraulic fluid to the level of the opening of the conduit.
3. A hydraulic fluid reservoir as claimed in claim 2, wherein the container has an interior and the conduit has in an upper portion extending upwardly from the top of the container and a lower portion extending downwardly from the top portion within the interior of the container.
4. A hydraulic fluid reservoir as claimed in claim 3, wherein the conduit is tubular.
5. A hydraulic fluid reservoir as claimed in claim 4, wherein the conduit has a cylindrical side wall on the bottom portion thereof, the opening being adjacent to the bottom of the conduit.

6. A hydraulic fluid reservoir as claimed in claim 5, wherein the conduit has a bottom surface extending part way across the bottom of the conduit from the side wall to the opening in the conduit, the bottom surface being visible from the top of the conduit when the closure member is removed.

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7. A hydraulic fluid reservoir comprising a container with a top, a bottom, side walls, a main interior chamber and a smaller chamber adjacent to one of the side walls having a top and a bottom and separated from the main interior chamber from the top of the smaller chamber to near the bottom thereof, a bottom opening near the bottom of the smaller chamber communicating with the main interior chamber, whereby hydraulic fluid enters the smaller chamber through the opening up to the level of hydraulic fluid in the main interior chamber, but bubbles in the hydraulic fluid within the main interior chamber are isolated from the smaller chamber.

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- 15 8. A hydraulic fluid reservoir has claimed in claim 7, wherein the top of the chamber is adjacent to the top of the container, the chamber having a top opening at the top thereof.

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9. A hydraulic fluid reservoir as claimed in claim 7, wherein the smaller chamber has a deflector adjacent to the bottom opening.

10. A hydraulic fluid reservoir as claimed in claim 9, wherein the deflector is spaced-apart from the bottom of the container.

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11. A hydraulic fluid reservoir as claimed in claim 10, wherein the deflector is fin-like, extends generally parallel to the bottom of the container and is above the bottom opening of the smaller chamber.

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12. A hydraulic fluid reservoir as claimed in claim 7, wherein the smaller chamber has side walls, one of the side walls comprising a portion of one of the side walls of the container.

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5        13. A hydraulic fluid reservoir as claimed in claim 8, including a photodetector mounted adjacent to said one of the side walls of the container and adjacent to the smaller chamber to detect a level of fluid within the smaller chamber and thereby a level of fluid within the container.

10      14. A hydraulic fluid reservoir as claimed in claim 13, wherein the container has a top portion and a bottom portion and the smaller chamber has two said side walls thereof extending outwardly from said one side wall of the container and being integral with the bottom portion of the chamber, the reservoir having another side wall extending between said two side walls thereof and spaced-apart from said one side wall of the container, said another side wall being integral with the top portion of the container.

15      15. A hydraulic fluid reservoir as claimed in claim 14, wherein the deflector is integral with said another side wall of the chamber.

20      16. A combination hydraulic pump and hydraulic fluid reservoir, comprising:

25      a reservoir container having a hollow body with a top; a conduit having a bottom within the container and a top above the bottom thereof, the conduit having an opening adjacent to the bottom of the conduit, the opening being spaced-apart below the top of the container; and a closure member releasably, sealingly connected to the top of the conduit, whereby hydraulic fluid can be added to the container via the conduit up to the level of the opening of the conduit, addition of further hydraulic fluid fills the conduit to the top thereof and the conduit overflows if additional hydraulic fluid is added after the top of the conduit is reached by the fluid; at least one hydraulic port and a hydraulic pump mounted on the container.

30      17. A combination as claimed in claim 16, wherein the reservoir is sealed apart from said closure member and said at least one port when the closure member is sealingly connected to the top of the conduit, and the pump is mounted on the container, and an

air pocket is thereby trapped in the container between the top of the container and the bottom of the conduit when the container is filled with hydraulic fluid to the level of the opening of the conduit.

- 5        18. A combination as claimed in claim 17, wherein the container has an interior and the conduit has in an upper portion extending upwardly from the top of the container and a lower portion extending downwardly from the top of the container within the interior of the container.
- 10      19. A combination as claimed in claim 18, wherein the conduit is tubular.
- 15      20. A combination as claimed in claim 19, wherein the conduit has a cylindrical side wall on the bottom portion thereof, the opening being adjacent to the bottom of the conduit and formed at an acute angle with the side wall.
- 20      21. A combination as claimed in claim 20, wherein the conduit has a bottom surface extending part way across the bottom of the conduit from the side wall to the opening in the conduit, the bottom surface being visible from the top of the conduit when the closure member is removed.
- 25      22. A combination pump and hydraulic fluid reservoir comprising a container with a top, a bottom, side walls, a main interior chamber and a smaller chamber adjacent to one of the side walls having a top and a bottom and separated from the main interior chamber from the top of the smaller chamber to near the bottom thereof, a bottom opening near the bottom of the smaller chamber communicating with the main interior chamber, whereby hydraulic fluid enters the smaller chamber through the opening up to the level of hydraulic fluid in the main interior chamber, but bubbles in the hydraulic fluid within the main interior chamber are isolated from the smaller chamber.

23. A combination as claimed in claim 22, wherein the top of the smaller chamber is adjacent to the top of the container, the smaller chamber having a top opening at the top thereof.
- 5        24. A combination as claimed in claim 22, wherein the smaller chamber has a deflector adjacent to the bottom opening.
- 10      25. A hydraulic fluid reservoir as claimed in claim 24, wherein the deflector is spaced-apart from the bottom of the container.
- 15      26. A combination as claimed in claim 25, wherein the deflector is fin-like, extends generally parallel to the bottom of the container and is above the bottom opening of the smaller chamber.
- 20      27. A combination as claimed in claim 22, wherein the smaller chamber has side walls, one of the side walls comprising a portion of one of the side walls of the container.
- 25      28. A combination as claimed in claim 23, including a photodetector mounted adjacent to said one of the side walls of the container and adjacent to the smaller chamber to detect a level of fluid within the smaller chamber and thereby a level of fluid within the container.
- 30      29. A combination as claimed in claim 28, wherein the container has a top portion and a bottom portion and the smaller chamber has two said side walls thereof extending outwardly from said one side wall of the container and being integral with the bottom portion of the smaller chamber, the reservoir having another side wall extending between said two side walls thereof and spaced-apart from said one side wall of the container, said another side wall being integral with the top portion of the container.
- 30      30. A combination as claimed in claim 29, wherein the deflector is integral with said another side wall of the container.